



# SOPRAROCK DD PLUS

SOPRAROCK DD (83B)

Order No. \*

\* Contact your Customer Service or Sales Representative.

## DESCRIPTION

SopraRock DD Plus (dual density) is a rigid mineral wool board insulation with a dense upper layer for durability and enhanced strength and a standard density bottom layer. The top surface is impregnated with a bitumen layer which is compatible with torch, mop or cold adhesive applied membrane. SopraRock DD Plus is designed for use on both new construction and re-roofing in low slope roofing applications.

SopraRock DD Plus is made from rock and slag. This combination results in a noncombustible product with a melting point of approximately 2150°F (1177°C). It is water resistant yet vapor permeable.

## INSTALLATION & APPLICATION

Each SopraRock DD Plus panel must be secured to the deck with approved fasteners and plates (appropriate to the deck type), a mopping of hot asphalt, acceptable insulation adhesive or approved base sheets over nailable decks. Butt edges and stagger joints of adjacent panels and subsequent overlay panels.

A coverboard is not required on most applications. A coverboard may be required to achieve elevated wind resistance of the total roof/insulation system. Contact the Technical Department for additional information.

SopraRock DD Plus is a suitable substrate for fully adhered modified bitumen. SopraRock DD Plus is a suitable substrate for hot asphalt, asphalt based cold adhesive and heat welded systems. Contact the Soprema Technical Department for additional information.

## FEATURES & BENEFITS

- Does not require a coverboard in many applications
- Will not promote blistering
- Does not off-gas
- Will not warp or cup
- Dimensionally stable
- High impact resistance
- Low moisture sorption
- Non-corrosive
- Fire resistant
- Made from natural & recycled materials



## SOPRAROCK DD PLUS THERMAL VALUES

THICKNESS INCHES (mm)	WEIGHT PER SQUARE POUNDS (kg)	R VALUE	C VALUE	FLUTE SPANABILITY INCHES (mm)
2.0" (50.8)	178.3 (80.87)	7.4	0.135	2 3/4" (69.85)
2.5" (63.5)	216.7 (98.29)	9.2	0.109	2 3/4" (69.85)
3.0" (76.2)	255.0 (115.66)	11.1	0.090	2 3/4" (69.85)
3.5" (88.9)	294.6 (133.62)	13.0	0.077	2 3/4" (69.85)
4.0" (101.6)	336.7 (152.72)	14.8	0.068	2 3/4" (69.85)
4.5" (114.3)	375.0 (170.09)	16.6	0.060	2 3/4" (69.85)
5.0" (127.0)	412.5 (187.11)	18.5	0.054	3 1/2" (88.90)
5.5" (139.7)	453.8 (205.84)	20.4	0.049	3 1/2" (88.90)
6.0" (152.4)	490.0 (222.26)	22.2	0.045	3 1/2" (88.90)

## APPROVALS / COMPLIANCES

### Underwriters Laboratories (UL)

UL Classified component of Class A Roof Systems: Built-Up and Modified Bitumen (UL 790).

Qualified for hourly rated P series roof assemblies: P004, P213, P214, P225, P228, P230, P237, P238, P242, P245, P250, P254, P259, P404, P501, P502, P504, P506, P508, P510, P512, P514, P701, P708, P710, P711, P718, P729, P732, P734, P735, P737, P740, P801, P810, P815, P828, P904, P909, P912, & P915 (UL 263).

### FM Global (FM)

SopraRock DD Plus is FM Class 1 Approved (FM 4450 & FM 4470) for constructions with Modified Bitumen and Built-Up roof coverings subject to conditions of approval described in FM Global RoofNav. SopraRock DD may be suitable for additional construction approvals. Please call Soprema Corporate Technical Department at 1-800-356-3521 for specifics.

### ASTM Specifications

SopraRock DD Plus meets ASTM C 726.

## WARNINGS & LIMITATIONS

SopraRock DD Plus must be kept dry at all times. Install only as much insulation as can be covered the same day by completed roof covering material. Soprema, Inc. will not be responsible for specific building and roof design by others, for deficiencies in construction or workmanship, for dangerous conditions on the job site or for improper storage and handling. Technical specifications shown in this literature are intended to be used as general guidelines only. Please call the Soprema Technical Department at 1-800-356-3521 for specifics.

## STANDARD SIZES

Available in 4'x4' (1220mm x 1220mm) panels in thickness of 2" (50.8 mm) to 6.0" (152.4 mm).



**SOPRAROCK DD PLUS PHYSICAL PROPERTIES**

PROPERTY	TEST STANDARD	MEASURE	VALUE
Dimensional Stability	ASTM C 356	Linear Shrinkage	0.01% @ 350°F (177°C)
Hail Performance	FM 4470	Test Standard for Susceptibility to Hail Damage	Class 1 - SH (Severe Hail)
Hail Performance	FM 4473	Impact Resistance by Impacting with Freezer Ice Balls	Class 4
Hail Performance	UL 2218	Impact Resistance of Prepared Roof Covering Materials	Class 4
Moisture Resistance	ASTM C 1104	Water Vapor Absorption	0.03%
Moisture Resistance	ASTM C 209	Water Absorption	<1.0%
Moisture Resistance	ASTM E 96	Water Vapor Transmission, Desiccant Method	>1716 ng/Pa.s.m <sup>2</sup> (>30 Perm)
Thermal Resistance	ASTM C 518 (C 177)	R-value/inch @ 75°F	3.7 hr.ft <sup>2</sup> /F/Btu
Thermal Resistance	ASTM C 518 (C 177)	RSI value/25.4 mm @ 24°C	0.65 m <sup>2</sup> /K/W
Corrosive Resistance	ASTM C 665	Corrosiveness to steel	Pass
Corrosive Resistance	ASTM C 795*	Corrosiveness to steel	Conforms
Compressive Strength (Top Layer)	ASTM C 165	at 10% at 25%	20.2 psi (139 kPa) 37.0 psi (252 kPa)
Compressive Strength (Entire Board - 3" thick)	ASTM C 165	at 10% at 25%	10.3 psi (71 kPa) 15.0 psi (103.5 kPa)
Density - Top	ASTM C 612-00 Actual	Density	13.75 lb/ft <sup>3</sup> (220kg/m <sup>3</sup> )
Density - Bottom	ASTM C 612-00 Actual	Density	10.0 lbs/ft <sup>3</sup> (160 kg/m <sup>3</sup> )

\* Provisions for lot testing may be required.

**WARRANTY**

SOPREMA offers several warranty options dependent upon membrane combinations, system assembly, and environmental conditions. Contact your local SOPREMA representative for project warranty offerings.